eCall™ User's Guide

TCP/IP-Access

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1 Introduction

With eCall's TCP/IP access, you can send messages to various call systems using the TCP/IP protocol.

2 Requirements for the Use of TCP/IP Access

The following requirements are necessary in order to send messages using TCP/IP:

- You must have a Business account with eCall.
- Access via TCP/IP must be set up in your Business account.
- Your software must be able to send messages using a TCP/IP connection.

3 Protocol

The processing of a transmission order to eCall requires up to four stages.

1. The client sends the transmission order to eCall.
2. eCall sends a result message to the client.
3. eCall sends notification to the client, if requested.
4. eCall sends a mobile phone recipient's return reply, if requested.

4 Message Formats

4.1 General Information

All messages consist of a command word and a parameter list. The specific elements of a message are separated from each other by tabs. Parameter ID and Value are separated by a colon. The order is completed with CR LF. The Parameter IDs are *case insensitive*, i.e. it does not matter if you use upper or lower case letters.

General Format:

[Command]<TAB>[Parameter ID 1]:[Parameter Value 1]<TAB>[Parameter ID 2]:[Parameter Value 2]...<CR><LF>

4.2 Transmission Order for Text Messages

Command	
SendPage	Command for a text message.
Must Parameter	
Address	Complete pager or mobile phone number (internat. format), or a list of numbers divided by a semicolon, or a name of a person or a group specified in the address book of the eCall account.
Message	Text to be displayed on the pager/mobile phone, cannot contain any tabs. CrLfs must be replaced with the <**CR**> und <**LF**> characters.
Optional Parameter	
JobID	Definite identification of the message.
AccountName	Name of the eCall business account.
AccountPassword	Password for the eCall business account.
Expanded Functions	
CallBack	Callback number only applicable for mobile phones, up to 16 numerical or up to 11 alphanumerical characters possible. **You cannot use a business number as a callback number!**
Answer	Answer function with eCall (mobile phone or pager number, e-mail or IP address, “ ” in the logbook) only applicable for mobile phones. *Note*: If the “Answer” parameter is transmitted, then the “Callback” value is ignored. Format for an Answer Message described in section 4.7.
Notification	Receiving address for notification, as soon as the mobile phone recipient has received the message (mobile phone or pager number, e-mail or IP address, “ ” in the logbook). Notification (or AlwaysNotification) format is described in section 4.6. **Attention**: Validity area of Notification(or AlwaysNotification) ports up to 32767.

AlwaysNotification	Receiving address for notification, as soon as something has changed in the notification status (pager or mobile phone). *Note*: If the "AlwaysNotification" parameter is transmitted, the "notification" parameter is not needed.
SendDate	Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).
MsgType	Delivery option for a specific type of message. Defined types are: - Flash -> Flash-SMS - PrioSMS+ -> PrioSMS+
NoLog	With this parameter delivery, the message will not be written in the logbook.

Example

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB> AccountPassword:yyy<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>AllwaysNotification:name@domain.ch<TAB>Answer:name@domain.ch<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>CallBack:+41791234567<TAB>Notification:192.168.0.56/15300<TAB>SendDate:2004-12-20 20:31:50<TAB>JobID:123AB<CR><LF>

SendPage<TAB>Address:+41791112233<TAB>Message:Hello World<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>MsgType:Flash<TAB>NoLog<CR><LF>

Note

The contents of notification or a reply to a mobile phone, pager, or an e-mail address are restricted to the status of notification or the reply of the recipient. An exception is the JobID, if this parameter was used, in which case it will be inserted at the end of an e-mail text.

4.3 Transmission Order for Fax Messages

Command

SendFax	Command for a fax message.

Must Parameter

Address	Complete fax number (internat. format), or a list of numbers devided by a semicolon, or a name of a person or a group specified in the address book of the eCall account.
Message	Fax message text, cannot contain any tabs. CrLfs must be replaced with the <**CR**> and <**LF**> characters.

Optional Parameter

JobID	Definite message identification.
AccountName	Name of the eCall Business account.
AccountPassword	Password for the eCall Business account.

Expanded Functions

CallingNumber	Sendernumber.
Subject	Subject.
FaxHeaderID	Sender in fax header.
FaxHeaderInfo	Info in fax header.
SendDate	Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).
MaxRetries	Number of retries.
RetriesTimeIntervallInMin	Delay between retries.
NoCoversheet	Use no coversheet.

Example

SendFax<TAB>Address:+41447873071<TAB>Subject:Hello World!<TAB>Message:Testmessage <CR><LF>

SendFax<TAB>Address:+41447873071<TAB>Subject:Test<TAB>Message:Testmessage<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>FromText:0041431234576<TAB>SendDate:2009-12-20 20:50<TAB>JobID:123AB<CR><LF>

4.4 Transmission Order for Voice Messages

Command

SendVoice	Command for a voice message.

Must Parameter

Address	Complete number (internat. format).
Message	Fax message text, cannot contain any tabs. CrLfs must be replaced with the <**CR**> und <**LF**> characters.

Optional Parameter

JobID	Definite message identification.
AccountName	Name of the eCall Business account.
AccountPassword	Password for the eCall Business account.

Expanded Functions

MessageLanguage	Determines the language in which the text is read out. The language parameters are as follows: German=DE, French=FR, Italian=IT, English=EN Default: Language is automatically recognized.
FromText	Contains the client's name, which is read out before the message.
SendDate	Determines the sending time of the order, in the case of delayed sending (yyyy-mm-dd hh:mm:ss).

Example

SendVoice<TAB>Address:+41447873070<TAB>FromText:Sample John<TAB>Message:Test Message <CR><LF>

SendVoice<TAB>Address:+41447873070<TAB>FromText:John Doe<TAB>Message:Testmessage<TAB>AccountName:xxx<TAB>AccountPassword:yyy<TAB>MessageLanguage:FR<TAB>SendDate:2009-12-20 20:50<TAB>JobID:123AB<CR><LF>

4.5 Message Status Request

Command	
GetState	Command for a status request.

Must parameter	
JobID	Message identification of the send request.

Optional parameter	
Address	Receiver address (internat. format). Format: international numbering format (+41791234567). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the state of the last job within the Job ID.
AccountName	Name of your eCall account.
AccountPassword	Password of your eCall account.

4.6 Response Message Request

In order to be able to take advantage of this function, the send request for the message has to be created with an empty „Answer"-Parameter, which means response into the logbook.

Command	
GetAnswer	Command for getting the answer

Must parameter	
JobID	Job identification of the Send request

Optional parameter	
Address	Receiver address (internat. format). This parameter should be supplied if the send request address was a number list or a group defined in eCall. If the address is not given in such a case, you'll receive the last job within answer with this Job ID.

AccountName	Name of your eCall account.
AccountPassword	Password of your eCall account.

4.7 Result Message for Send Requests

Command

ResultPage	Command for a result message.

Must Parameter

ResultCode	Result code (according to paragraph error codes).
ResultText	Result in cleartext (according to paragraph error codes).

Optional Parameter

JobID	Definite message identification, if it was included in the transmission order.

Example

ResultPage<TAB>ResultCode:0<TAB>ResultText:Page Accept<CR><LF>

Please note that the result message only shows that the transmission order was accepted by eCall. It does not say whether or not the order was successfully transmitted to the appropriate call center or to the recipient.

4.8 Result Message for Status Requests

Command

ResultPage	Command for a result message.

Must parameter

ResultCode	Result code according to the table „Error Codes“.
ResultText	Result in plain text according to the table „Error Codes“.

Optional Parameter

JobID	Identification of the message.
Address	Receiver address (internat. format).

JobType	Jobtype according to table “Job types”.
SendState	Send state of the job according to table “Send States”.
ErrorState	Error state of the job according to table “Error States.
PointsUsed	Number of points used for the message.
FinishDate	Finish date of the send request (yyyy-mm-dd hh:mm:ss).

Examples

a) when a job was found:

ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:abcdef<TAB>JobID:abcde Address:+41791234567<TAB>JobType:6<TAB>SendState:44<TAB>ErrorState:0<TAB>PointsUsed: 3<TAB>FinishDate:2006-10-30-08:55:28<CR><LF>

b) when no job was found:

ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>

4.9 Result for a Response Message request

Command

ResultPage	Command for a result message.

Must parameter

ResultCode	Result code according to the table „Error Codes“.
ResultText	Result in plain text according to the table „Error Codes“.

Optional Parameter

JobID	Identification of the message.
FromAddress	Sender address (internat. format).
JobType	Jobtype according to table “Job types”.
AnswerState	Response state according to table „Response types“.
AnswerMessage	Response Message.
FinishDate	Finish date of the response (yyyy-mm-dd hh:mm:ss).

Examples:
a) when an Answer message was found:
ResultPage<TAB>ResultCode:0<TAB>ResultText:OK<TAB>JobID:IPTESTANSWER<TAB>FromAddress:+41791234567<TAB>JobType:0<TAB>AnswerState:2<TAB>AnswerMessage:Answer from ABC<TAB>FinishDate:2006-11-22 08:59:06<CR><LF>

b) when no answer message was found:
ResultPage<TAB>ResultCode:11912<TAB>ResultText:JobID not found:abcdef<CR><LF>

4.10 Notification Message

Command

Notification	Command for a notification message.

Must Parameter

NotificationCode	Message status code (according to Notification Table).
NotificationText	Status in cleartext (according to Notification Table).
Number	Contains the notification recipient's number.
TimeStamp	Contains the time of receipt of a sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX>	In order for us to note the notification message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Optional Parameter

JobID	Contains the definite message identification, if it was included in the transmission order.

Example
Notification<TAB> NotificationCode:0<TAB> NotificationText:Message has been delivered <TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>

Notification Table

NotificationCode	NotificationText	Description
0	Message has been delivered	The recipient confirmed the receipt of the forwarded message.
1	Message has been buffered	Receipt of the forwarded message could not be confirmed yet.
2	Message has not been been delivered	Receipt of the forwarded message could not be confirmed.
3	Error Code / Error Message	Determines the error at transmission to the appropriate center.
4	Transmission OK	The transmission order was forwarded to the appropriate center.

4.11 Answer Message

Command

Answer — Command for an answer message.

Must Parameter

Message — Shows the message that we received.

Number — Shows the sender number of this reply (internat. format).

TimeStamp — Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX> — In order for us to note the answer message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Optional Parameter

JobID — Shows the definite identification of the sent message, if it was included in the transmission order.

Example

Answer<TAB>Message:Time is OK. Say Hi to John<TAB>Number:+41793726262<TAB>TimeStamp:18.09.2000 12:15:45<CR><LF>

For each response message a read receipt is requested. If this receipt is not transmitted, the request will be retransmitted.

4.12 SMS Incoming Message

Command

IncomingSMS	Command for a SMS incoming message.

Must Parameter

Message	Shows the message that we received.
AddressTo	Shows the receiver number of this message (internat. format).
AddressFrom	Shows the sender number of this message (internat. format).
TimeStamp	Shows the time of receipt of the sent message (dd.mm.yyyy hh:mm:ss).

Read Confirmation

OK<ETX>	In order for us to note the SMS incoming message as forwarded, you have to reply to the message receipt with OK<ETX>. The connection to us will then be terminated.

Optional Parameter

Example

IncomingSMS<TAB>Message: Time is OK. Say Hi to John<TAB> AddressFrom:+41790000000 <TAB>AddressTo:+41763332020<TAB>TimeStamp:18.09.2007 12:15:45<CR><LF>

For each incoming message a read receipt is requested. If this receipt is not transmitted, the request will be retransmitted.

5 Error codes

ErrorCode	ErrorText	Description
11000	SyntaxError	SyntaxError
11001	PermissionDenied	Access is denied
11100	AdrAdCInvalid	Invalid or incorrect recipient's address
11101	AdrNAdInvalid	Invalid or incorrect confirmation address
11102	AdrAdCMissing	Recipient address missing
11103	AdrNAdMissing	Notification address missing
11104	AdrAdCTooMany	Too many recipient addresses transmitted
11105	AdrAdCNotAllowed	Recipient address is not within defined area
11200	MsgNoCharacters	No message existent
11201	MsgInvalidCharacters	Invalid characters in the message
11202	MsgSendTimeInvalid	Invalid sending time given
11203	MsgSendTimeNotAllowed	Sending time is not within time slot
11300	AccNoUser	Unknown user
11301	AccNoUnits	Not enough credits in account
11303	AccNoFreeUnits	Not enough free credits in account
11400	CallSystemInvalid	Invalid call system
11401	CallSystemInvalidForUser	Invalid call system for this user
11402	CallSystemNotSupported	Call system is not supported
11403	CallSystemConfused	Call system is temporarily out of order
11500	IDMissing	ID is missing
11501	IDInvalid	ID could not be found
11502	IDDoesNotExist	ID does not exist in the system
11600	StateAlreadyTransmitted	Message already transmitted
11700	DataReadError	Data contents could not be read
11800	CBMsgError	Callback contains a forbidden number or text
11911	JobIDRequired	The status request does not contain a JobID
11912	JobIDNotFound	No job was found with the supplied ID

6 Status and Response Message Request Tables

6.1 Job Type

JobType	Description
1	SMS or pager-message
2	Mail-message
3	IP-message
4	Delete request
5	Voice-message
6	Fax-message
7	Picture
8	Logo
9	Ringtone
10	MMS-message

6.2 Answer Status

JobType	Description
1	Waiting for answer
2	Answer received
3	Holding time for answer expired
4	SMS answer to eCall not possible
5	SMS received

6.3 Send Status

Type	SendStatus	Description
SMS / Pager	0	Transmitting
	1	Transmission OK
	2	Error The error detail can be found in the Field ErrorState, the description in chapter 6.4
	3	Scheduled transmission time
	8	Reception confirmed
	9	Transmission OK (Reception not yet confirmed)
	10	Transmission OK (Reception not confirmed
	11	Meldung angekommen, mit Bestätigung des Empfängers
Voice	30	Message is being transferred to voice system.
	31	Message successfully transferred to voice system.
	32	Transfer of message to voice system was not successful.
	33	Message played successfully
	34	Message played successfully and feedback received
	35	Message with invalid phone number.

	36	Message reception confirmed
	37	No connection within defined time range.
	38	Receiver is being called
	39	Receiver could not be reached, retry pending
Fax	101	Fax message ready for dispatch.
	201	Fax message is being prepared.
	202	Converting document(s) of fax message
	301	Converting document(s) of fax message
	401	Merging documents of fax message
	402	Fax message is being processed
	501	Processing Single Job finished
	41	Processing Job group finished
	42	Versand OK
	43	Error The error detail can be found in the Field ErrorState, the description in chapter 6.4
	44	Receiver could not be reached. Retry pending

6.4 Error Status

Type	ErrorStatus	Description
SMS / Pager	71	No Job accepted message from gateway
	1000	Connection cancelled
	1001	Timeout: The message could not be sent.
	5111	The text is too long
	5112	Invalid call number
	5120	Ziel-Rufnummer ist eine Tonrufnummer: Meldung unzulässig
	5121	Ziel-Rufnummer ist eine Numeriknummer: Unzulässiges Zeichen
	5155	Zu starker Verkehr
	5164	Call system troubled
	5502	Message from provider: Syntax error
	5504	Message from provider: Operation not allowed - Maximum messages for the address exceeded
	5506	Message from provider: ADC invalid
Fax	6000	Unknown error
	6002	Error converting the documents
	6004	No response
	6005	Empty order.
	6006	Line busy
	6007	Call rejected
	6009	Unknown calling number
	6010	Invalid calling number
	6011	Number changed
	6013	The receiver is not a fax device
	6014	Connection dropped by sender
	6015	Connection dropped by receiver

7 Connection Data

7.1 IP Addresses for Send Requests (Client -> eCall)

Primary Access

Dest-IP:	tcpipint1.ecall.ch (193.93.208.132)
Dest-Port:	2711

Secondary Access

Dest-IP:	tcpipint2.ecall.ch (193.93.208.151)
Dest-Port:	2711

In either case, the connection will be closed again 60 seconds after connection establishment.

7.2 IP Adress of Answers or Incomings (eCall -> Client)

Source IP Address:	193.93.208.200
Source-Port:	undefined (open; 0 till 65535)
Dest-IP:	freely definable
Dest-Port:	freely definable

Format for transfer: *192.168.0.1/1234*

8 Identification

eCall only accepts orders if the sender can be identified. The following criteria can selectively be used in order to identify the sender:

- IP address of sender
- IP address and IP port of sender
- Account name and password

These criteria can, as a matter of course, also be combined. Please contact us for further identification possibilities.

9 Access Test

You can use TELNET, for example, in order to conduct a simple access test. Please note the requirements for access use. In addition, you need to know if the account name and the account password are necessary for identification.

A) Open a text editor (e.g. Notepad) and write an order (Tabs between the parameters, end with Return), e.g.:

SendPage Address:+41740342686 Message:Test via eCall
AccountName:CompanyXY AccountPassword:123456

B) Mark the text, including the blank line that follows.

C) Choose “Copy“ in the menu.

D) Start-up Telnet (with START -> Run -> telnet). **Careful**: Windows 2000 Telnet does not function faultlessly. You can find a fully functionning version of Telnet at www.ecall.ch, see “help”-> access via TCP/IP.

E) Choose “Connect” – Remote System in the Telnet menu.

F) Specify the hostname: tcpipint1.ecall.ch and port: 2711-> Connect.

G) Choose “Edit“ -> “Paste” in the menu.

You should now receive a result message from eCall.